

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on February 25, 2003, and the references cited therewith.

Claims 1, 11, and 20 are amended, and no claims are cancelled or added; as a result, claims 1-29 remain pending in this application.

§103 Rejection of the Claims

Claims 1-29 were rejected under 35 USC § 103(a) as being unpatentable over Drako et al. (U.S. 5,371,877) in view of Rust et al., (U.S. 5,699,530), in further view of DeWilde et al. (U.S. 6,434,674).

Drako discusses implementing a dual port FIFO memory by using two banks of single-port RAM, and an apparatus for interleaving reads and writes between banks such that successive writes will be to different memory banks, and such that the memory bank not being written may be read.

Rust describes a circular RAM-based FIFO buffer using interleaved storage and cross pointers. A first RAM bank stores even data, and a second RAM bank stores odd data. A read pointer and a write pointer use shift registers to select the written or read element.

DeWilde is relied upon to show a FIFO buffer 26 located between a memory-coupled MUX 12 and controllers 32 and 34. The FIFO units are described as bi-directional, but little additional detail is given

The present invention, in contrast, comprises in some embodiments a system for controlling write access to banks in a multi-bank FIFO to ensure written data is valid. Claims 1, 11, and 20 have been amended to more clearly reflect this function of the embodiments of the invention claimed therein, by reciting the first and second write pointers and their interaction via null states, as well as operation of the write control timing logic in selectively granting write access to the banks of memory elements at predetermined times by enabling the first and second write pointers at times dependent on received strobe signal preamble timing. These features are believed to distinguish the claims of the present invention from each of the cited references, and from any combination of the cited references.

Applicant believes the amendments presented here bring the claims into condition for allowance, for the reasons stated here and as explained in the Office Action in p. 5, section 6, titled "Allowable Subject Matter". Reexamination and allowance of pending claims 1-29 is therefore respectfully requested.

Conclusion

Applicant respectfully submits that the amended claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 349-9581 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

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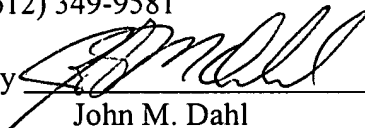
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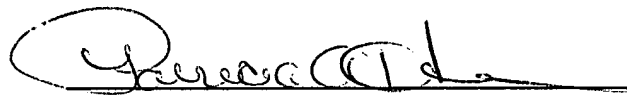
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 26th day of April, 2004.

PATRICIA A. HULTMAN

Name



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